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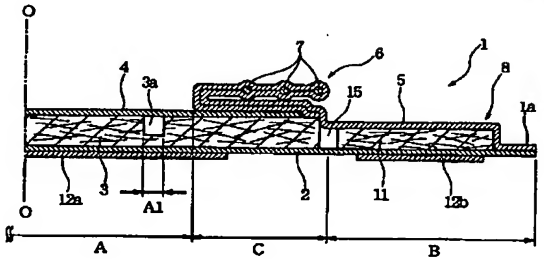
(71)出願人　000115108
ユニ・チャーム株式会社
愛媛県川之江市金生町下分182番地
(72)発明者　水谷　聡
香川県三豊郡豊浜町和田浜高須賀1531－７
ユニ・チャーム株式会社テクニカルセンター内
(72)発明者　田上　悦子
香川県三豊郡豊浜町和田浜高須賀1531－７
ユニ・チャーム株式会社テクニカルセンター内
(74)代理人　100085453
弁理士　野▲崎▼　照夫

最終頁に続く

(54)【発明の名称】　生理用ナプキン

(57)【要約】
【課題】　就寝中の寝返りなどが起こると、生理用ナプキンの後方のフラップ部の端部が、身体と中央の吸収性本体との間に折れ重なる状態で巻き込まれやすく、液の吸収能力が低下し、且つ着用者に不快な異物感を与える。
【解決手段】　生理用ナプキンの後方部では、主吸収領域Ａの高剛性部Ａ１を含む領域と、側部領域Ｂと、防漏側壁６が重ねられている境界領域Ｃとで、剛軟度が、主吸収領域Ａ＞境界領域Ｃ＞側部領域Ｂとなっている。よって主吸収領域Ａが捩れにくく、フラップが形成された側部領域Ｂは、境界領域Ｃが存在しているために主吸収領域Ａと重なるように変形しづらい。

図３



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【特許請求の範囲】

【請求項１】　縦方向に延びる主吸収領域と、前記主吸収領域の両側部に位置する側部領域と、前記主吸収領域と前記側部領域との間の境界領域で縦方向に延びる防漏側壁とが設けられ、前記主吸収領域では、液不透過性の裏面シートと液透過性の表面シートとの間に縦方向に延びる主吸収体が設けられている生理用ナプキンにおいて、

縦方向の後方部では、前記主吸収領域の少なくとも一部に高剛性部が形成され、前記後方部では、前記側部領域が左右両側へ膨んだ後部フラップが形成され、この後部フラップでは前記裏面シートと表面側に位置するシートとの間に副吸収体が介在しており、

前記後方部では、主吸収領域の前記高剛性部が形成された領域、前記境界領域、前記後部フラップのそれぞれの１０ｍｍ幅における、縦方向の剛軟度が、主吸収領域＞境界領域＞後部フラップであることを特徴とする生理用ナプキン。

【請求項２】　前記主吸収領域の剛軟度が９．８～２９．４ｍＮ、境界領域の剛軟度が３．９４～８．８ｍＮ、後部フラップの剛軟度が０．４９～３．４３ｍＮである請求項１記載の生理用ナプキン。

【請求項３】　前記後方部で、前記主吸収体の少なくとも一部が圧縮されて前記高剛性部が形成されている請求項１または２記載の生理用ナプキン。

【請求項４】　前記後方部において、前記主吸収体が一部で圧縮されて縦方向に線状に延びる前記高剛性部が形成されており、前記剛軟度は前記縦方向に延びる前記高剛性部を含む幅１０ｍｍの領域で測定されるものである請求項３記載の生理用ナプキン。

【請求項５】　前記防漏側壁は、前記後方部において折り畳まれ、前記後方部よりも前方において受液側から立ち上がり可能とされている請求項１ないし４のいずれかに記載の生理用ナプキン。

【請求項６】　前記境界領域と、前記後部フラップとの境界部には、折り癖部が設けられている請求項１ないし５のいずれかに記載の生理用ナプキン。

【請求項７】　前記折り癖部では、前記主吸収体と前記副吸収体とが分離されている請求項６記載の生理用ナプキン。

【請求項８】　前記副吸収体が複数に分離されている請求項１ないし７のいずれかに記載の生理用ナプキン。

【発明の詳細な説明】

【０００１】

【発明の属する技術分野】本発明は、生理用ナプキンに係わり、特に後方部における液漏れと、後方部の身体へのフィット性を高めた生理用ナプキンに関する。

【０００２】

【従来の技術】例えば特開２０００－１８９４５９号公報に記載された生理用ナプキンは、縦方向の後部に、吸

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収性本体の両側部において側方へ膨らんだ形状のフラップ部が設けられ、幅方向の中央部に吸収体が形成されているとともに、前記フラップ部に前記吸収体とは別の吸収体が設けられている。この生理用ナプキンでは、吸収性本体の後方部特に身体の尻部に滲出した経血を前記フラップ部で吸収でき、その結果、後方部での液の横漏れが防止できるようになっている。

【０００３】

【発明が解決しようとする課題】しかし、上記公報に記載された生理用ナプキンは、後方部において中央部分の吸収体とフラップ部に設けられた吸収体との境界部が容易に変形しやすい構造であるため、着用中、特に就寝中の寝返りなどにより、生理用ナプキンの後方部に捩れ力等が作用すると、まず中央部分の吸収体が変形しやすく、さらにフラップ部が中央側へスライドしまたは中央側に折り返って、フラップ部が中央部分に重なるように変形するおそれがある。

【０００４】前記フラップ部が中央部分の受液側に重なると、後方部での経血の吸収が阻害されて横漏れが生じやすくなり、さらに生理用ナプキンのフィット感が失われ、着用者の尻部に違和感を与えることになる。

【０００５】本発明は上記従来の課題を解決するためのものであり、着用中、特に就寝中における後方のフラップ部が中央部側へ変形するのを防止して、フィット感を損なわず、後方部での横漏れを有効に防止できる生理用ナプキンを提供することを目的としている。

【０００６】

【課題を解決するための手段】本発明は、縦方向に延びる主吸収領域と、前記主吸収領域の両側部に位置する側部領域と、前記主吸収領域と前記側部領域との間の境界領域で縦方向に延びる防漏側壁とが設けられ、前記主吸収領域では、液不透過性の裏面シートと液透過性の表面シートとの間に縦方向に延びる主吸収体が設けられている生理用ナプキンにおいて、縦方向の後方部では、前記主吸収領域の少なくとも一部に高剛性部が形成され、前記後方部では、前記側部領域が左右両側へ膨んだ後部フラップが形成され、この後部フラップでは前記裏面シートと表面側に位置するシートとの間に副吸収体が介在しており、前記後方部では、主吸収領域の前記高剛性部が形成された領域、前記境界領域、前記後部フラップのそれぞれの１０ｍｍ幅における、縦方向の剛軟度が、主吸収領域＞境界領域＞後部フラップであることを特徴とするものである。

【０００７】例えば、前記主吸収領域の剛軟度が９．８～２９．４ｍＮ、境界領域の剛軟度が３．９４～８．８ｍＮ、後部フラップの剛軟度が０．４９～３．４３ｍＮである。すなわち、主吸収領域、境界領域、後部フラップの、剛軟度の比が、９．８～２９．４：３．９４～８．８：０．４９～３．４３として表すことができる。

【０００８】また、例えば、前記後方部で、前記主吸収

体の少なくとも一部が圧縮されて前記高剛性部が形成されているものであり、あるいは、前記後方部において、前記主吸収体が一部で圧縮されて縦方向に線状に延びる前記高剛性部が形成されており、前記剛軟度は前記縦方向に延びる前記高剛性部を含む幅１０ｍｍの領域で測定されるものである。あるいは、前記主吸収体が予め厚く形成された後に主吸収体のほぼ全域が圧縮されて、後方部での主吸収体が、それよりも前方に位置する主吸収体よりも剛軟度が高くなって、後方部の主吸収領域のほぼ全域が前記高剛性部とされていてもよい。

【０００９】また、前記防漏側壁は、前記後方部において折り畳まれ、前記後方部よりも前方において受液側から立ち上がり可能とされ、前記後方部の境界領域では、防漏側壁が折り畳まれた部分の１０ｍｍ幅、または折り畳まれた防漏側壁を含む１０ｍｍ幅の部分の剛軟度が前記のように規定される。

【００１０】また、前記境界領域と、後部フラップとの境界部には、折り癖部が設けられていることが好ましい。

【００１１】さらに、前記折り癖部では、前記主吸収体と前記副吸収体とが分離されているものとすることができ、さらに、前記副吸収体が複数に分離されているものであってもよい。

【００１２】本発明の生理用ナプキンでは、後部フラップが形成された後方部において、中央部の主吸収領域に高剛性部が設けられているため、生理用ナプキンの捩り力が作用したときに主吸収領域が変形しにくい。また主吸収領域と後部フラップとの境界領域は、防漏側壁が設けられた嵩高な構造となり且つ後部フラップよりも剛軟度が高くなっている。よって、捩り力などが作用したときに、後部フラップが主吸収領域へ重なるように折れたりスライドする変形が生じにくくなる。また後部フラップは変形しやすく装着者の尻部にフィットしやすい。

【００１３】

【発明の実施の形態】以下、本発明について図面を参照して説明する。

【００１４】図１は本発明の生理用ナプキンの実施の形態を示す平面図、図２は図１のII－II線における半断面図、図３は図１のIII－III線における半断面図、図４は他の実施の形態での図３に相当する半断面図、図５は図１の実施の形態における主吸収体と副吸収体の形状を示す透視平面図、図６は他の実施の形態を示す図５に相当する透視平面図である。なお、前記図２、図３、図４は縦方向に延びる中心線Ｏ－Ｏの片側半分の断面図であり、他方の半分は前記各図と対称構造である。

【００１５】図１ないし図３に示す生理用ナプキン１は、縦方向（Ｙ方向）に延びる中心線Ｏ－Ｏを介して左右対称形状である。幅方向の中央部分は、縦方向に延びる所定幅の主吸収領域Ａ、左右両側部は側部領域Ｂ，Ｂ、前記主吸収領域Ａと前記側部領域Ｂ，Ｂとの境界部分が境界領域Ｃ，Ｃである。そして、前記主吸収領域Ａのうちの剛軟度が高められている部分が高剛性部Ａ１、Ａ１である。

【００１６】また縦方向では、所定の長さＬ１の範囲（後に説明する後部フラップおよび前記高剛性部Ａ１が形成されている長さ範囲）が後方部、前記後方部Ｌ１よりも前方の残り部分（長さＬ２）が前方部である。前記長さＬ２の前方部において、Ｌ３の長さの範囲が、後に説明する防漏側壁が立ち上がり可能とされた防漏領域である。なお、前記防漏領域（Ｌ３の部分）が前記後方部（Ｌ１の部分）の途中まで延び、または後方部（Ｌ１の部分）のほぼ全長に渡るまで延びていてもよい。

【００１７】図２と図３に示すように、生理用ナプキンの裏面の全域に液不透過性シートからなる裏面シート２が設けられている。前記裏面シート２上には主吸収体３が設けられている。図５に示すように、前記主吸収体３は、前記主吸収領域Ａとその両側部の境界領域Ｃ，Ｃを合わせた幅寸法にほぼ一致しており、且つ縦方向のほぼ全域に渡って設けられている。

【００１８】受液側となる表面側では、前記主吸収体３を覆う液透過性の表面シート４が設けられている。この表面シート４は、前記主吸収領域Ａとその両側部の境界領域Ｃ，Ｃを合わせた幅寸法にほぼ一致する幅寸法を有しており、縦方向の全長に渡って設けられている。

【００１９】前記側部領域Ｂでは、受液側の表面に液不透過性または疎水性のシート５が設けられている。このシート５は、前記主吸収体３の左右両側部の前記境界領域Ｃ，Ｃにおいて、２枚重ねに折り畳まれて、防漏側壁６，６が形成されている。前記防漏側壁６，６では、前記シート５の折り畳み内部に複数本（図では３本）の弾性部材７が挟まれて接着されており、この弾性部材７は前記防漏側壁６，６において縦方向のほぼ全長に設けられている。

【００２０】図３に示すように、前記後方部（Ｌ１の部分）では、前記防漏側壁６，６が平坦状に折り畳まれた状態で表面シート４の表面に接着され、または熱融着されており、同様に、前方部（Ｌ２の部分）における前記防漏領域（Ｌ３の部分）よりも前方の部分で、前記防漏側壁６，６が同様に折り畳まれて表面シート４の表面に接着され、または熱融着されている。また前記防漏領域（Ｌ３の部分）では、前記防漏側壁６，６が自由状態である。

【００２１】外力が与えられていない自由状態の生理用ナプキン１は、前記弾性部材７の弾性収縮力によって、受液側が凹状になるように湾曲し、その結果、前記防漏領域（Ｌ３の部分）では、防漏側壁６，６が図２に示すように立ち上がる。そして防漏領域（Ｌ３の部分）では、防漏側壁６，６が、受液側へ立ち上がる側壁部６ａと、前記側壁部６ａの上部から自由端（折り返し端）６ｃが外側へ向くように変形した肌当接部６ｂと、が形成

されている。

【００２２】図２に示すように、生理用ナプキン１の左右両縁部１ａ，１ａで、前記裏面シート２と前記シート５とが接合されている。また図１と図５に示す縦方向の前縁部１ｂでは、前記裏面シート２と前記表面シート４とが接合され、後縁部１ｃでも、前記裏面シート２と前記表面シート４とが接合されている。前記接合は、ホットメルト型接着剤による接着、または熱融着（熱シール）などで行われる。

【００２３】図１と図５に示すように、生理用ナプキン１の後方部（Ｌ１の部分）では、前記側部領域Ｂ，Ｂがそれよりも前方の部分に比べて左右両側に広がって、その縁部が曲線を描く形状となった後部フラップ８，８が形成されている。また前記前方部（Ｌ２の部分）では、前記側部領域Ｂ，Ｂが、左右両側部へ突出してウイング９，９が形成されている。この生理用ナプキン１は、前記ウイング９，９が下着のクロッチ部を挟むように裏側に折り返されて使用される。また前記後部フラップ８，８は装着者の尻部に当てられる。

【００２４】図３および図５に示すように、前記後部フラップ８，８では、前記裏面シート２と表面側に位置するシート５との間に副吸収体１１が挟まれている。また、図２と図５に示すように、前記ウイング９，９では、前記裏面シート２と前記シート５とが接合されている。

【００２５】前記生理用ナプキン１では、裏面シート２の外面に、下着に粘着させるための粘着層が設けられている。図２と図３に示すように、前記裏面シート２の外面では、主吸収領域Ａのほぼ裏面側において粘着層１２ａが設けられ、前記後部フラップ８，８に粘着層１２ｂ，１２ｂが、前記ウイング９，９に粘着層１２ｃ，１２ｃが設けられている。

【００２６】この生理用ナプキン１を装着する際には、前記粘着層１２ａが、下着のクロッチ部に粘着され、前記粘着層１２ｂ，１２ｂが下着の尻当て部側に粘着させられる。そして前記ウイング９，９は下着のクロッチ部の両側部を巻き込むように折り返され、粘着層１２ｃ，１２ｃが下着のクロッチ部の外面に粘着される。

【００２７】前記主吸収体３は、エアレイドパルプ、薄葉紙、ポリマーシート、綿状パルプ又は天然セルロース繊維の積層物等の親水性材料又は混合物で形成されており、その幅方向の寸法は５０～１００ｍｍ程度である。例えば、綿状パルプを坪量２００～５００ｇ／ｍ²の範囲で積層し、薄葉紙で被覆した後、密度が５０～１２０ｍｇ／ｃｍ³となるようにプレス成形したものである。また前記繊維積層物に高分子吸収材（ＳＡＰ）を５～４０質量%混合し、前記高分子吸収材の吸収力で主吸収体３内での液体の流動を阻止できるようにしたものであってもよい。

【００２８】図１と図５に示すように、前記主吸収体３では、後方部Ｌ１すなわち後部フラップ８，８が設けられている領域において、縦方向に線状に延びる圧縮部（または圧搾部）３ａ，３ａが設けられ、この圧縮部３ａ，３ａの部分およびその周囲部分が高剛性部Ａ１，Ａ１となっている。この線状の圧縮部３ａ，３ａは、前記中心線Ｏ－Ｏを挟んで左右対称位置に１本ずつ（あるいは複数本ずつでも可）形成されており、両圧縮部３ａ，３ａは互いに平行である。

【００２９】圧縮部３ａは主吸収領域Ａに設けられ、圧縮部３ａの幅寸法は２～５ｍｍである。なお、前記主吸収領域Ａの幅寸法は２０～６０ｍｍである。

【００３０】前記副吸収体１１は、前記主吸収体３と同じ材料で形成される。この場合、副吸収体１１の目付けと主吸収体３の目付けが同じであってもよいが、副吸収体１１の目付けが主吸収体３の目付けよりも小さいことが好ましい。例えば主吸収体３と副吸収体１１が共に親水性の繊維積層物で形成され、前記境界領域Ｃと側部領域Ｂとの境界線上で、主吸収体３と副吸収体１１とが分離して、両吸収体３と１１が同じティッシュペーパで包まれているものである。その結果、境界領域Ｃと側部領域Ｂとの境界線上には、吸収体が存在していない折り癖部１５，１５が形成されている。

【００３１】また、副吸収体１１が主吸収体３と異なる材質であり、例えば副吸収体１１がスルーエアー方式で形成されたクッション性に富む不織布、親水性フォーム樹脂シート、親水処理されたフォームシートなどで形成されてもよい。

【００３２】前記表面シート４は、疎水性繊維の不織布、疎水性繊維と親水性繊維で形成された不織布、疎水性繊維で形成された開孔不織布、開孔フィルムなどで形成されている。また前記表面シート４は身体へのフィット性を高めるため、嵩高に成形されていてもよく、この場合の嵩高寸法は１～１５ｍｍ程度が好ましい。

【００３３】前記裏面シート２は、通気性の樹脂フィルム、疎水性繊維で形成された不織布、前記不織布とフィルムとのラミネート材などで形成されている。

【００３４】防漏側壁６，６を形成するシート５は、疎水性合成繊維で構成された不織布、発泡シート、開孔フィルム、開孔不織布などを用いることができる。またその他の材料としては、疎水性合成繊維に親水処理を施しシート化した不織布、疎水性合成繊維とビスコースレーヨン、アセテートレーヨン、天然セルロース繊維等の親水性繊維混合物が挙げられる。あるいは前記材料で構成した防漏側壁６，６の内部に高分子吸収体をティッシュペーパで被覆したＳＡＰシート、エアレイドパルプ、親水性メルトブロン不織布、パルプシート、レーヨンスパンレース不織布等の吸収性材料を配置させ、防漏側壁６，６に接触した液体を吸収保持できるようにしてもよい。

【００３５】前記弾性部材７は、熱可塑性合成ゴムを主

成分としたフィルム状、糸状、ネット状物、若しくは天然ゴムを主成分とした板状、糸状物より選択することができ、自然長から１．１～２．０倍の範囲内で引き延ばした状態で０．４９～１．４７Ｎの範囲内の力を与えた状態で防漏側壁６，６に接着固定されたものが好ましい。

【００３６】なお防漏側壁６，６の立ち上がり寸法は、側壁部６ａの高さが５～５０ｍｍ、肌当て部６ｂの幅寸法が５～３０ｍｍである。

【００３７】図３に示すように、後部フラップ８，８が形成された後方部（Ｌ１の部分）では、境界領域Ｃにおいて防漏側壁６が折り畳まれて積層されている（なお、後方部（Ｌ１の部分）の少なくとも一部において防漏側壁６が図２に示すように立ち上がっていてもよい）。よって前記境界領域Ｃでは断面形状が嵩高となっている。

【００３８】そして、前記後方部（Ｌ１の部分）では、主吸収領域Ａでの高剛性部Ａ１すなわち圧縮部３ａが設けられている領域、後部フラップ８が形成された側部領域Ｂ、防漏側壁６が設けられた境界領域Ｃで剛軟度が相違しており、剛軟度が、高剛性部Ａ１が設けられた領域＞境界領域Ｃ＞後部フラップ８となっている。

【００３９】ここで、前記剛軟度は、横方向（Ｘ方向）の幅寸法が１０ｍｍで縦方向に延びるように切断された試料を測定したものであり、前記主吸収領域Ａでは圧縮部３ａを含む１０ｍｍ幅の試料（圧縮部３ａが多数本形成されている場合には１０ｍｍ幅に複数の圧縮部３ａが存在することも有り得る）、前記境界領域Ｃでは前記防漏側壁６を含む１０ｍｍ幅の試料である。

【００４０】前記剛軟度は、前記試料を、ガーレ柔軟度試験機（株式会社安田精機製作所製：製品番号３１１）を用い、ＪＩＳ　Ｌ　１０９６　８．２０．１（１９９９年）　Ａ法（ガーレ法）に基づいて測定したものである。この剛軟度は、高剛性部Ａ１が設けられている主吸収領域Ａで９．８～２９．４ｍＮ、境界領域Ｃで３．９４～８．８ｍＮ、後部フラップが形成された側部領域Ｂで０．４９～３．４３ｍＮの範囲が好ましい。

【００４１】この生理用ナプキンでは、後方部（Ｌ１の部分）において、両側方へ膨らむ形状の後部フラップ８，８が形成されており、この部分が装着者の尻部に当てられて、就寝時などにおいて尻部からの経血の横漏れを防止できるようにしている。

【００４２】前記後方部（Ｌ１の部分）では、主吸収領域Ａに高剛性部Ａ１が設けられているため、主吸収領域Ａが折れたり捩れることが少なく、主吸収領域Ａが肌から離れたりずれるのを防止できる。

【００４３】前記主吸収領域Ａの側方には、防漏側壁６を有して嵩高となり、しかも後部フラップ８よりも剛軟度の高い境界領域Ｃが位置しているが、この境界領域Ｃは嵩高であるため肌へのクッション性が高く肌への当りが柔らかい。しかも、境界領域Ｃは適度な剛軟度を有しているため、主吸収領域Ａと重なるように捩れまたはスライドしあるいは折り込まれることが少ない。

【００４４】また後部フラップ８，８には副吸収体１１が位置しているため、後部フラップ８に流れた経血を吸収することができ、生理用ナプキン１の横漏れを有効に防止できる。さらに、後部フラップ８は剛軟度が低いために尻部の形に追従してフィットし、また折り癖部１５を有するため、尻部の側方への湾曲に追従してフィットしやすい。

【００４５】比較的剛軟度の低い後部フラップ８と主吸収領域Ａとの間には、前記のように後部フラップ８よりも剛軟度の高い境界領域Ｃが存在しているため、後部フラップ８が捩じれたり変形したとしても、主吸収領域Ａと重なる状態に変形しづらくなる。よって折れや捩れによって後部フラップ８と主吸収領域Ａとが重なることがなく、主吸収領域Ａの吸収能力が低下したり、肌への違和感を生じさせることが少ない。

【００４６】図４に示す他の実施の形態では、後方部（Ｌ１の部分）において、主吸収体３と副吸収体１１とが繋がっており、境界領域Ｃと後部フラップ８との境界線上において、前記主吸収体３と副吸収体１１との境界部で吸収体が圧縮されて、または厚みが減少させられて折り癖部１６が形成されている。さらに後部フラップ８の外周縁に沿うように副吸収体１１の縁部に圧縮部１７が形成されている。

【００４７】経血が後部フラップ８に至り副吸収体１１に吸収され、その経血が副吸収体１１内または表面を側方へ移動したときに、密度が高くなっている前記圧縮部１７に経血が引き付けられて圧縮部１７で保持される。よって経血が後部フラップ８からさらに側方へ洩れにくくなる。

【００４８】次に、図６に示すさらに他の実施の形態では、前記後部フラップ８，８に設けられた副吸収体１１が分離線で分離され、または圧縮されて折り癖部１８が形成されている。この折り癖部１８により副吸収体１１が縦方向に分割されている。この実施の形態では、副吸収体１１が縦方向に向けて湾曲しやすくなり、装着者の尻部の形状にさらに追従して変形しやすくなる。

【００４９】なお、後方部（Ｌ１の部分）での主吸収領域Ａにおいて、主吸収体３の全域が、前方部（Ｌ２の部分）よりも剛軟度が高くなるように圧縮させられるなどして主吸収領域Ａのほぼ全域が高剛性部Ａ１となっていてもよい。

【００５０】

【発明の効果】以上詳述した本発明によれば、生理用ナプキンの着用中、特に就寝中における後部フラップの巻き込みを防止でき、主吸収領域の吸収機能が損なわれたり、または、フィット感を損なうことがない。また後部フラップが液吸収機能を有するため、液の横漏れを有効に防止できる。

【図面の簡単な説明】

【図１】本発明の生理用ナプキンの実施の形態を示す平面図、

【図２】図１のII－II線における半断面図、

【図３】図１のIII－III線における半断面図、

【図４】本発明の他の実施の形態の生理用ナプキンを示す図３に相当する半断面図、

【図５】図１に示す生理用ナプキンの主吸収体および副吸収体の形状を示す透視平面図、

【図６】本発明の他の実施の形態の生理用ナプキンを示す図５に相当する透視半面図、

【符号の説明】

１　生理用ナプキン

２　裏面シート

＊３　主吸収体

３ａ　圧縮部

４　表面シート

５　シート

６　防漏側壁

７　弾性部材

８　後部フラップ

９　ウイング

１１　副吸収体

１５　折り癖部

Ａ　主吸収領域

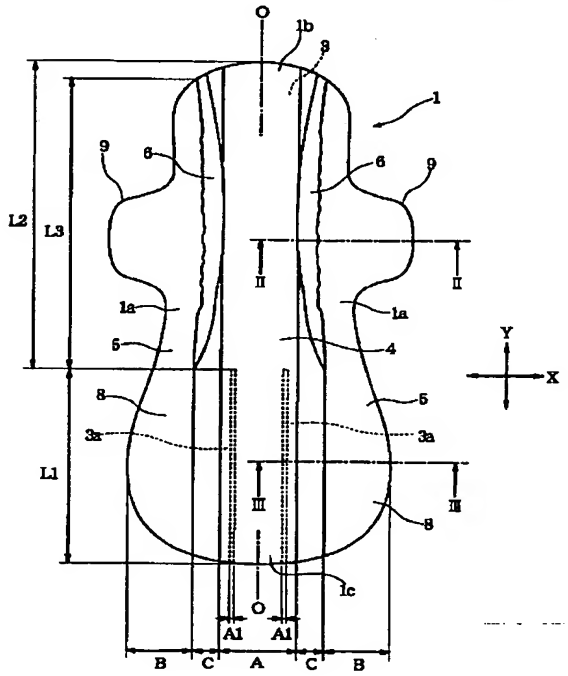
Ａ１　高剛性部

Ｂ　側部領域

＊　Ｃ　境界領域

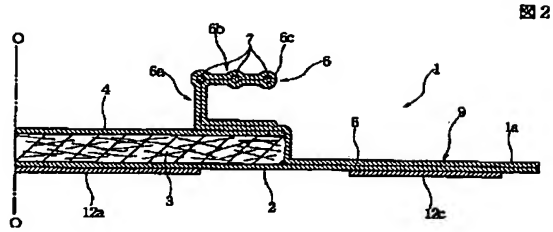
【図１】

図1



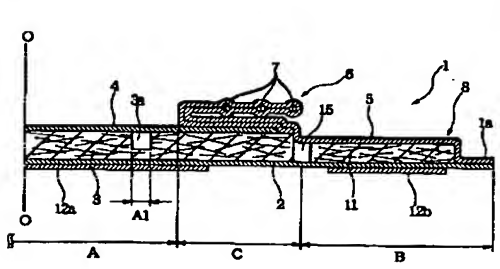
【図２】

図2



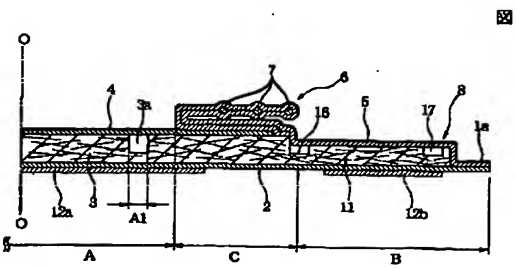
【図３】

図3



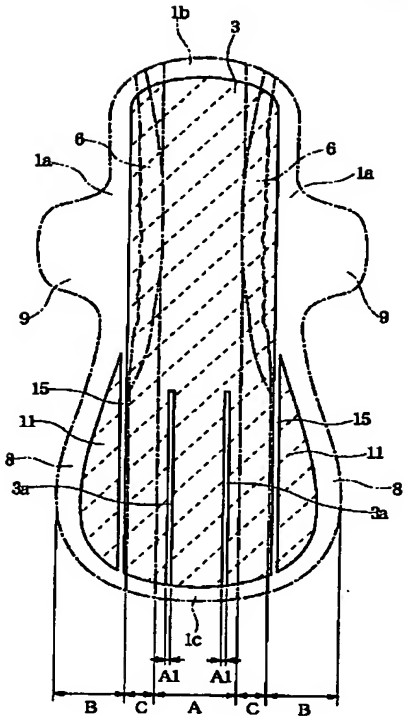
【図４】

図4



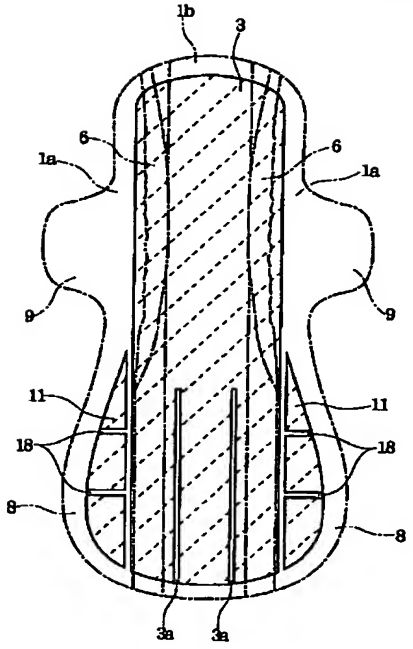
【図５】

図５



【図６】

図６



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(72)発明者　西谷　和也
香川県三豊郡豊浜町和田浜高須賀1531－７
ユニ・チャーム株式会社テクニカルセンター内

(72)発明者　末兼　真
香川県三豊郡豊浜町和田浜高須賀1531－７
ユニ・チャーム株式会社テクニカルセンター内

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(71)Applicant : **UNI CHARM CORP**
(72)Inventor : **MIZUTANI SATOSHI**
TAGAMI ETSUKO
NISHITANI KAZUYA
SUEKANE MAKOTO

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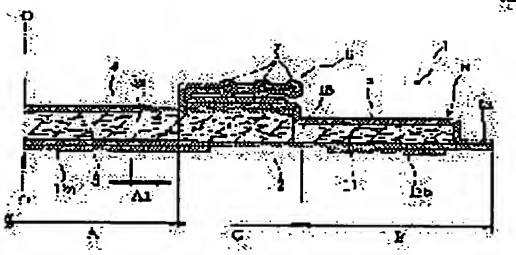
(54) **SANITARY NAPKIN**



(57)Abstract:
PROBLEM TO BE SOLVED: To solve a problem such that a decrease in capacity to absorb a liquid and an uncomfortable foreign-body sensation felt by a wearer are brought about because an end of a flap part in a rear part of a sanitary napkin tends to get caught in a state of being folded for overlapping between a body and a central absorbent body when the wearer tosses about in sleep or does other things.
SOLUTION: In regard to an area including a highly rigid part A1 of a main absorption area A, a side area B and a boundary area C, where a leakage preventing side wall 6 is superposed, in the rear part of the sanitary napkin, the absorption area A is made higher in bending resistance than the boundary area C, which is made higher in bending resistance than the side area B. Accordingly, the absorption area A is hard to kink, and the presence of the boundary area C makes it hard for the side area B formed with a flap to be deformed in such a manner as to overlap with the absorption area A.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

CLAIMS

[Claim(s)]
[Claim 1] The main absorption field which extends in a lengthwise direction, and the flank field located in the both-sides section of said main absorption field, The leakproof side attachment wall prolonged in a lengthwise direction in the border area between said main absorption fields and said flank fields is established. In said main absorption field In the sanitary napkin with which the main absorber prolonged in a lengthwise direction is formed between the rear-face sheet of liquid impermeability, and the surface sheet of liquid permeability in the back section of a lengthwise direction The high rigidity section is formed in said a part of main absorption field [at least]. In said back section The posterior part flap to which said flank field swelled to right-and-left both sides is formed, and the subabsorber intervenes with this posterior part flap between said rear-face sheets and sheets located in a front-face side. In said back section The sanitary napkin with which bending resistance of a lengthwise direction in each 10mm width of face of the field in which said high rigidity section of the main absorption field was formed, said border area, and said posterior part flap is characterized by being a main absorption field > border area > posterior part flap.
[Claim 2] The sanitary napkin according to claim 1 whose bending resistance of 3.94 - 8.8mN and a posterior part flap the bending resistance of 9.8 - 29.4mN and a border area is 0.49-3.43mN for the bending resistance of said main absorption field.
[Claim 3] The sanitary napkin according to claim 1 or 2 with which said some of main absorbers [at least] are compressed, and said high rigidity section is formed in said back section.
[Claim 4] It is the sanitary napkin according to claim 3 which is what said main absorber is compressed partly, and said high rigidity section prolonged in a line is formed in the lengthwise direction in said back section, and is measured in a field with a width of face [containing said high rigidity section to which said bending resistance extends in said lengthwise direction] of 10mm.
[Claim 5] Said leakproof side attachment wall is a sanitary napkin according to claim 1 to 4 which is folded up in said back section, starts from a liquid receiving side in the front rather than said back section, and is made possible.
[Claim 6] The sanitary napkin according to claim 1 to 5 with which the chip box peculiarity section is prepared in the boundary section of said border area and said posterior part flap.
[Claim 7] The sanitary napkin according to claim 6 with which said main absorber and said subabsorber are separated in said chip box peculiarity section.
[Claim 8] The sanitary napkin according to claim 1 to 7 with which said subabsorber is divided into plurality.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] Especially this invention relates to the sanitary napkin which raised the fit nature to the liquid spill in the back section, and the body of the back section with respect to a sanitary napkin.
[0002]
[Description of the Prior Art] For example, while the flap section of the configuration where the sanitary napkin indicated by JP,2000-189459,A swelled to the side in the both-sides section of an absorptivity body at the posterior part of a lengthwise direction is prepared and the absorber is formed in the crosswise center section, the absorber other than said absorber is formed in said flap section. In this sanitary napkin, the menstrual blood which oozed out to the back section of an absorptivity body, especially the bottom part of the body can be absorbed in said flap section, consequently the horizontal leakage of the liquid in the back section can be prevented now.
[0003]
[Problem(s) to be Solved by the Invention] However, the sanitary napkin indicated by the above-mentioned official report Since it is the structure which is easy to transform the boundary section of the absorber of a central part, and the absorber formed in the flap section easily in the back section, When it is twisted in the back section of a sanitary napkin and the force etc. acts by changing sides under sleeping etc. especially during wear, there is a possibility of deforming so that may be easy to transform the absorber of a central part first, and the flap section may slide to a central site further, or it may break into a central site and the flap section may lap with a central part on the contrary.
[0004] When said flap section laps with the liquid receiving side of a central part, absorption of the menstrual blood in the back section will be checked, it will become easy to produce horizontal leakage, the feeling of a fit of a sanitary napkin will be lost further, and sense of incongruity will be given to a wearer's bottom part.
[0005] It prevents that this invention is for solving the above-mentioned conventional technical problem, and the flap section of the back especially under sleeping deforms it into a center-section side during wear, and a feeling of a fit is not spoiled, but it aims at offering the sanitary napkin which can prevent the horizontal leakage by the back section effectively.
[0006]
[Means for Solving the Problem] The main absorption field where this invention is prolonged in a lengthwise direction, and the flank field located in the both-sides section of said main absorption field, The leakproof side attachment wall prolonged in a lengthwise direction in the border area between said main absorption fields and said flank fields is established. In said main absorption field In the sanitary napkin with which the main absorber prolonged in a lengthwise direction is formed between the rear-face sheet of liquid impermeability, and the surface sheet of liquid permeability in the back section of a lengthwise direction The high rigidity section is formed in said a part of main absorption field [at least]. In said back section The posterior part flap to which said flank field swelled to right-and-left both sides is formed, and the subabsorber intervenes with this

posterior part flap between said rear-face sheets and sheets located in a front-face side. In said back section Bending resistance of a lengthwise direction in each 10mm width of face of the field in which said high rigidity section of the main absorption field was formed, said border area, and said posterior part flap is characterized by being a main absorption field > border area > posterior part flap.

[0007] For example, for the bending resistance of said main absorption field, the bending resistance of 9.8 - 29.4mN and a border area is [the bending resistance of 3.94 - 8.8mN and a posterior part flap] 0.49-3.43mN. That is, the ratio of bending resistance of the main absorption field, a border area, and a posterior part flap can express as 9.8-29.4:3.94-8.8:0.49-3.43.

[0008] Moreover, for example, in said back section, said some of main absorbers [at least] are compressed, said high rigidity section is formed, in said back section, said main absorber is compressed partly, said high rigidity section prolonged in a line is formed in the lengthwise direction, and said bending resistance is measured in a field with a width of face [containing said high rigidity section prolonged in said lengthwise direction] of 10mm. after [or] said main absorber was formed thickly beforehand -- the main absorber of the main absorber with which the whole region is mostly compressed and the main absorber in the back section is ahead located rather than it -- bending resistance -- high -- becoming -- the main absorption field of the back section -- the whole region may be mostly made into said high rigidity section.

[0009] Moreover, said leakproof side attachment wall is folded up in said back section, in the front, it starts from a liquid receiving side rather than said back section, it is supposed that it is possible, and the bending resistance of the part of 10mm width of face of the part by which the leakproof side attachment wall was folded up, or 10mm width of face including the folded-up leakproof side attachment wall is prescribed as mentioned above by the border area of said back section.

[0010] Moreover, it is desirable that the chip box peculiarity section is prepared in the boundary section of said border area and a posterior part flap.

[0011] Furthermore, in said chip box peculiarity section, said main absorber and said subabsorber shall be separated, and said subabsorber may be further divided into plurality.

[0012] In the sanitary napkin of this invention, in the back section in which the posterior part flap was formed, since the high rigidity section is prepared in the main absorption field of a center section, when a sanitary napkin twists and the force acts, it is hard to transform the main absorption field. Moreover, the border area of the main absorption field and a posterior part flap serves as the bulky structure where the leakproof side attachment wall was established, and bending resistance is high rather than the posterior part flap. Therefore, when it twists and the force etc. acts, it is hard coming to generate the deformation which breaks or is slid so that a posterior part flap may lap to the main absorption field. Moreover, a posterior part flap tends to fit a wearing person's bottom part that it is easy to deform.

[0013]

[Embodiment of the Invention] Hereafter, this invention is explained with reference to a drawing.

[0014] The top view in which drawing 1 shows the gestalt of operation of the sanitary napkin of this invention, a half section Fig. [in / in drawing 2 / the II-II line of drawing 1], a half section Fig. [in / in drawing 3 / the III-III line of drawing 1], the half section Fig. where drawing 4 is equivalent to drawing 3 in the gestalt of other operations, the fluoroscopy top view showing the configurations of the main absorber [in / in drawing 5 / gestalt of operation of drawing 1] and a subabsorber, and drawing 6 are the fluoroscopy top views equivalent to drawing 5 which shows the gestalt of other operations. In addition, said drawing 2 , drawing 3 , and drawing 4 are the sectional views of the single-sided one half of center line O-O prolonged in a lengthwise direction, and the one half of another side is said each drawing and symmetrical structure.

[0015] The sanitary napkin 1 shown in drawing 1 thru/or drawing 3 is a bilateral symmetry configuration through center line O-O prolonged in a lengthwise direction (the direction of Y). The boundary parts of the flank fields B and B, and said main absorption field A and said flank fields B and B of the main absorption field A and the right-and-left both-sides section of the predetermined width of face to which a crosswise central part extends in a lengthwise direction are border areas C and C. And the parts to which the bending resistance of said main absorption fields A is raised are the high rigidity sections A1 and A1.
[0016] Moreover, in a lengthwise direction, the range of the predetermined die length L1 (die-length range in which the posterior part flap explained later and said high rigidity section A1 are formed) is [the front remaining part (die length L2)] the front section from the back section and said back section L1. In the front section of said die length L2, it is the leakproof field which the leakproof side attachment wall which the range of the die length of L3 explains later started, and was made possible. in addition -- up to [as said leakproof field (part of L3) is said back section (part of L1)] -- extending -- or the back section (part of L1) -- you may extend until it crosses to an overall length mostly.
[0017] As shown in drawing 2 and drawing 3 , the rear-face sheet 2 which consists of a liquid impermeable sheet throughout the rear face of a sanitary napkin is formed. The main absorber 3 is formed on said rear-face sheet 2. the width-of-face dimension with which said main absorber 3 doubled said main absorption field A and border areas C and C of the both-sides section as shown in drawing 5 -- about 1 -- I do -- **** -- and a lengthwise direction -- it is mostly crossed and prepared in the whole region.
[0018] In the front-face side which becomes a liquid receiving side, said main absorber 3 is formed in the surface sheet 4 of wrap liquid permeability. This surface sheet 4 has the width-of-face dimension mostly in agreement in the width-of-face dimension which doubled said main absorption field A and border areas C and C of that both-sides section, and is prepared over the overall length of a lengthwise direction.
[0019] In said flank field B, the liquid impermeable or hydrophobic sheet 5 is formed in the front face by the side of liquid receiving. This sheet 5 is folded up by the two-sheet pile in said border areas C and C of the right-and-left both-sides section of said main absorber 3, and the leakproof side attachment walls 6 and 6 are formed. by said leakproof side attachment walls 6 and 6, two or more elastic members (drawing 3) 7 are pinched by the interior of folding of said sheet 5, and it pastes up -- having -- **** -- this elastic member 7 -- said leakproof side attachment walls 6 and 6 -- setting -- a lengthwise direction -- it is mostly prepared in the overall length.
[0020] As shown in drawing 3 , in said back section (part of L1) Paste the front face of the surface sheet 4, or heat welding of said leakproof side attachment walls 6 and 6 is carried out in the condition of having been folded up in the shape of flatness, and similarly rather than said leakproof field (part of L3) in the front section (part of L2) in a front part Said leakproof side attachment walls 6 and 6 are folded up similarly, and paste the front face of the surface sheet 4, or heat welding is carried out. Moreover, in said leakproof field (part of L3), said leakproof side attachment walls 6 and 6 are in a free condition.
[0021] By the elastic recoil of said elastic member 7, the sanitary napkin 1 in the free condition that external force is not given curves so that a liquid receiving side may become a concave, consequently in said leakproof field (part of L3), as the leakproof side attachment walls 6 and 6 show drawing 2 , it starts. And in the leakproof field (part of L3), skin contact section 6b and ** which were transformed so that free-end (clinch edge) 6c might be outside suitable from the upper part of side-attachment-wall section 6a from which the leakproof side attachment walls 6 and 6 start to a liquid receiving side, and said side-attachment-wall section 6a are formed.

[0022] As shown in drawing 2 , said rear-face sheet 2 and said sheet 5 are joined at right-and-left both the edges 1a and 1a of a sanitary napkin 1. Moreover, in first transition section 1b of the lengthwise direction shown in drawing 1 and drawing 5 , said rear-face sheet 2 and said surface sheet 4 are joined, and said rear-face sheet 2 and said surface sheet 4 are joined also for trailing-edge section 1c. Said junction is performed by the adhesion by hot melt adhesive, or heat welding (heat seal).
[0023] As shown in drawing 1 and drawing 5 , in the back section (part of L1) of a sanitary napkin 1, the posterior part flaps 8 and 8 from which said flank fields B and B became the configuration on which it spreads on right-and-left both sides compared with a front part rather than it, and the edge draws a curve are formed. Moreover, in said front section (part of L2), said flank fields B and B project to the right-and-left both-sides section, and wings 9 and 9 are formed. This sanitary napkin 1 is used for it by the background, being turned up so that said wings 9 and 9 may insert the KUROTCHI section of underwear. Moreover, said posterior part flaps 8 and 8 are applied by a wearing person's bottom part.
[0024] As shown in drawing 3 and drawing 5 , with said posterior part flaps 8 and 8, the subabsorber 11 is inserted between said rear-face sheets 2 and sheets 5 located in a front-face side. Moreover, as shown in drawing 2 and drawing 5 , by said wings 9 and 9, said rear-face sheet 2 and said sheet 5 are joined.
[0025] In said sanitary napkin 1, the adhesive layer for making it adhere to underwear is prepared in the external surface of the rear-face sheet 2. it is shown in drawing 2 and drawing 3 -- as -- the external surface of said rear-face sheet 2 -- the main absorption field A -- adhesive layer 12a is mostly prepared in a rear-face side, adhesive layers 12b and 12b are formed in said posterior part flaps 8 and 8, and adhesive layers 12c and 12c are prepared for said wings 9 and 9.
[0026] In case it equips with this sanitary napkin 1, said adhesive layer 12a adheres to the KUROTCHI section of underwear, and said adhesive layers 12b and 12b are made to adhere to the hips reliance section side of underwear. And said wings 9 and 9 are turned up so that the both-sides section of the KUROTCHI section of underwear may be involved in, and adhesive layers 12c and 12c adhere to the external surface of the KUROTCHI section of underwear.
[0027] Said main absorber 3 is formed with the hydrophilic ingredient or mixture of air RAID pulp, tissue paper, a polymer sheet, curdy pulp, or natural cellulose fiber, such as laminated material, and the dimension of the cross direction is about 50-100mm. For example, the laminating of the curdy pulp is carried out in the range of a basis weight 200 - 500 g/m2, and after covering with tissue paper, press forming is carried out so that a consistency may serve as 50 - 120 mg/cm3. Moreover, 5-40 mass % mixing of a macromolecule absorber (SAP) is done at said fiber laminated material, and you may enable it to prevent a flow of the liquid within the main absorber 3 with the absorptive power of said macromolecule absorber.
[0028] As shown in drawing 1 and drawing 5 , in said main absorber 3, in the field in which the back section 8 and L1 8, i.e., posterior part flaps, is formed, the compression zones (or squeezing section) 3a and 3a prolonged in a line are formed in a lengthwise direction, and the part and its perimeter part of these compression zones 3a and 3a serve as the high rigidity sections A1 and A1. On both sides of said center line O-O, every (or two or more are good at a time) one of these linear compression zones 3a and 3a is formed in the bilateral symmetry location, and both the compression zones 3a and 3a are mutually parallel.
[0029] Compression zone 3a is prepared in the main absorption field A, and the width-of-face dimension of compression zone 3a is 2-5mm. In addition, the width-of-face dimension of said main absorption field A is 20-60mm.
[0030] Said subabsorber 11 is formed with the same ingredient as said main absorber 3. In this case,

although the superintendent officer of the main absorber 3 may be the same as the superintendent officer of the subabsorber 11, it is desirable that the superintendent officer of the subabsorber 11 is smaller than the superintendent officer of the main absorber 3. For example, both the main absorber 3 and the subabsorber 11 are formed with the fiber laminated material of a hydrophilic property, the main absorber 3 and the subabsorber 11 dissociate on the boundary line of said border area C and flank field B, and both the absorbers 3 and 11 are wrapped in the same facial tissue. Consequently, on the boundary line of a border area C and the flank field B, the chip box peculiarity sections 15 and 15 in which the absorber does not exist are formed.

[0031] Moreover, it is the quality of the material in which the subabsorber 11 differs from the main absorber 3, for example, the subabsorber 11 may be formed with the nonwoven fabric which is rich in the cushioning properties formed by the through air method, a hydrophilic form resin sheet, the foam sheet by which hydrophilic processing was carried out.

[0032] Said surface sheet 4 is formed with the nonwoven fabric of hydrophobic fiber, the nonwoven fabric formed for hydrophobic fiber and hydrophilic fiber, the puncturing nonwoven fabric formed for hydrophobic fiber, the puncturing film, etc. Moreover, in order that said surface sheet 4 may raise the fit nature to the body, it may be fabricated by bulky and the bulky dimension in this case has about 1-15mm desirable [the sheet].

[0033] Said rear-face sheet 2 is formed with the laminate material of the resin film of permeability, the nonwoven fabric formed for hydrophobic fiber, said nonwoven fabric, and a film etc.

[0034] The nonwoven fabric which consisted of hydrophobic synthetic fibers, a foaming sheet, a puncturing film, a puncturing nonwoven fabric, etc. can be used for the sheet 5 which forms the leakproof side attachment walls 6 and 6. Moreover, hydrophilic fiber mixture, such as a nonwoven fabric which performed and sheet-ized hydrophilic processing to the hydrophobic synthetic fiber as other ingredients, a hydrophobic synthetic fiber, and viscose rayon, acetate rayon, natural cellulose fiber, is mentioned. Or absorptivity ingredients, such as an SAP sheet which covered the high-polymer absorbent with facial tissue inside the leakproof side attachment walls 6 and 6 constituted from said ingredient, air RAID pulp, a hydrophilic melt BURON nonwoven fabric, a pulp sheet, and a rayon span ball-race nonwoven fabric, are arranged, and it is made to carry out absorption maintenance of the liquid in contact with the leakproof side attachment walls 6 and 6.

[0035] Said elastic member 7 has that desirable by which adhesion immobilization was carried out at the leakproof side attachment walls 6 and 6 where the force of 0.49-1.47N within the limits is given in the condition of could choose from tabular and ****** which used as the principal component the shape of the shape of a film which used thermoplastic synthetic rubber as the principal component, and yarn, a network-like object, or natural rubber, and having extended within the limits of 1.1 to 2.0 times from natural length.

[0036] In addition, the height of side-attachment-wall section 6a is [the width-of-face dimension of 5-50mm and skin reliance section 6b of the standup dimension of the leakproof side attachment walls 6 and 6] 5-30mm.

[0037] As shown in drawing 3 , in the back section (part of L1) in which the posterior part flaps 8 and 8 were formed, the laminating of the leakproof side attachment wall 6 is folded up and carried out in the border area C (in addition, as the leakproof side attachment wall 6 shows a part of back section [at least] (part of L1) to drawing 2 , you may start). Therefore, in said border area C, the cross-section configuration serves as bulky.

[0038] and -- said -- back -- the section (part of L1) -- **** -- main -- absorption -- a field -- A -- high -- rigidity -- the section -- A -- one -- namely, -- a compression zone -- three -- a -- preparing -- having -- **** -- a field -- a posterior part -- a flap -- eight -- forming -- having had -- a flank -- a field -- B -- leakproof -- a side attachment wall -- six -- preparing -- having had -- a border area -- C

-- bending resistance -- different -- **** -- bending resistance -- high -- rigidity -- the section -- A -- one -- preparing -- having had -- a field -- > -- a border area -- C -- > -- a posterior part -- a flap -- eight -- becoming -- **** -- .

[0039] Here, said bending resistance measures the sample cut so that a lateral (the direction of X) width-of-face dimension might be prolonged in a lengthwise direction in 10mm, and is the sample (when actual formation of much compression zone 3a is carried out, it is also possible that two or more compression zone 3a exists in 10mm width of face) of 10mm width of face which contains compression zone 3a in said main absorption field A, and the sample of 10mm width of face which includes said leakproof side attachment wall 6 in said border area C.

[0040] Whenever Gurley flexible, a testing machine (made in the Yasuda [, Inc.] energy machine factory: part number 311) is used for said bending resistance for said sample, and it is JIS. L 1096 8.20.1 (1999) It measures based on A law (Gurley method). This bending resistance has the desirable range of 0.49-3.43mN in the flank field B in which 3.94 - 8.8mN and a posterior part flap were formed in 9.8 - 29.4mN and a border area C in the main absorption field A in which the high rigidity section A1 is formed.

[0041] In the back section (part of L1), the posterior part flaps 8 and 8 of the configuration which swells to the method of both sides are formed, this part is put in this sanitary napkin by a wearing person's bottom part, and it enables it to prevent the horizontal leakage of the menstrual blood from a bottom part in the time of sleeping etc.

[0042] In said back section (part of L1), since the high rigidity section A1 is formed in the main absorption field A, the main absorption field A can break, or it is rare to be twisted and the main absorption field A can prevent [**** / separating from the skin] shifting.

[0043] Although it has the leakproof side attachment wall 6, it becomes bulky and the border area C where bending resistance is higher than the posterior part flap 8 is moreover located in the side of said main absorption field A, since this border area C is bulky, the cushioning properties to the skin are high and its hit by the skin is soft. And since the border area C has moderate bending resistance, it is rare [it] a twist or to be slid or inserted in so that it may lap with the main absorption field A.

[0044] Moreover, since the subabsorber 11 is located in the posterior part flaps 8 and 8, the menstrual blood which flowed to the posterior part flap 8 can be absorbed, and the horizontal leakage of a sanitary napkin 1 can be prevented effectively. Furthermore, since it follows and fits the form of a bottom part since the posterior part flap 8 has low bending resistance, and it has the chip box peculiarity section 15, it follows the curve to the side of a bottom part, and tends to fit.

[0045] Since the border area C as mentioned above where bending resistance is higher than the posterior part flap 8 exists between the posterior part flaps 8 and the main absorption fields A where bending resistance is comparatively low, even if the posterior part flap 8 is twisted in it or it deforms into it, it is hard coming to deform into the condition of lapping with the main absorption field A. Therefore, it is rare for the posterior part flap 8 and the main absorption field A to lap neither by a crease nor twist, and for the absorptance of the main absorption field A to decline, or to produce the sense of incongruity to the skin.

[0046] In the back section (part of L1), the main absorber 3 and the subabsorber 11 are connected, and an absorber is compressed in the boundary section of said main absorber 3 and subabsorber 11 on the boundary line of a border area C and the posterior part flap 8, or thickness is decreased, it breaks by the gestalt of other operations shown in drawing 4 , and the peculiarity section 16 is formed with it. The compression zone 17 is formed in the edge of the subabsorber 11 so that the periphery edge of the posterior part flap 8 may furthermore be met.

[0047] When menstrual blood results in the posterior part flap 8, it is absorbed by the subabsorber 11 and the menstrual blood moves the inside of the subabsorber 11, or a front face to the side, it is

drawn by menstrual blood to said compression zone 17 to which the consistency is high, and is held by the compression zone 17. Therefore, menstrual blood stops further easily being able to leak from the posterior part flap 8 to the side.
[0048] Next, the subabsorber 11 formed in said posterior part flaps 8 and 8 is separated by the separation line, or it is compressed, and breaks by the gestalt of other operations to the pan shown in drawing 6 , and the peculiarity section 18 is formed with it. The subabsorber 11 is divided into the lengthwise direction by this chip box peculiarity section 18. With the gestalt of this operation, it becomes easy to curve towards a lengthwise direction, and the subabsorber 11 follows the configuration of a wearing person's bottom part further, and it becomes easy to transform it into it.
[0049] in addition, the whole region of the main absorber 3 is made to compress in the main absorption field A in the back section (part of L1), so that bending resistance becomes high rather than the front section (part of L2) etc. -- carrying out -- the main absorption field A -- the whole region may serve as the high rigidity section A1 mostly.
[0050]
[Effect of the Invention] According to this invention explained in full detail above, during wear of a sanitary napkin, the contamination of the posterior part flap especially under sleeping can be prevented, the absorption function of the main absorption field is not spoiled, or a feeling of a fit is not spoiled. Moreover, since a posterior part flap has a liquid absorption function, the horizontal leakage of liquid can be prevented effectively.

[Translation done.]

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] The top view showing the gestalt of operation of the sanitary napkin of this invention,
[Drawing 2] The half section Fig. in the II-II line of drawing 1 ,
[Drawing 3] The half section Fig. in the III-III line of drawing 1 ,
[Drawing 4] The half section Fig. equivalent to drawing 3 which shows the sanitary napkin of the gestalt of other operations of this invention,
[Drawing 5] The fluoroscopy top view showing the configuration of the main absorber of the sanitary napkin shown in drawing 1 , and a subabsorber,
[Drawing 6] The fluoroscopy top view equivalent to drawing 5 which shows the sanitary napkin of the gestalt of other operations of this invention,
[Description of Notations]

1 Sanitary Napkin
2 Rear-Face Sheet
3 The Main Absorber
3a Compression zone
4 Surface Sheet
5 Sheet
6 Leakproof Side Attachment Wall
7 Elastic Member
8 Posterior Part Flap
9 Wing
11 SubAbsorber
15 Chip Box Peculiarity Section
A The main absorption field
A1 Quantity rigidity section
B Flank field
C Border area

[Translation done.]

* NOTICES *
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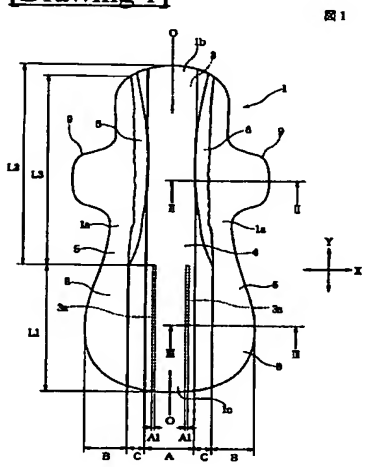
1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

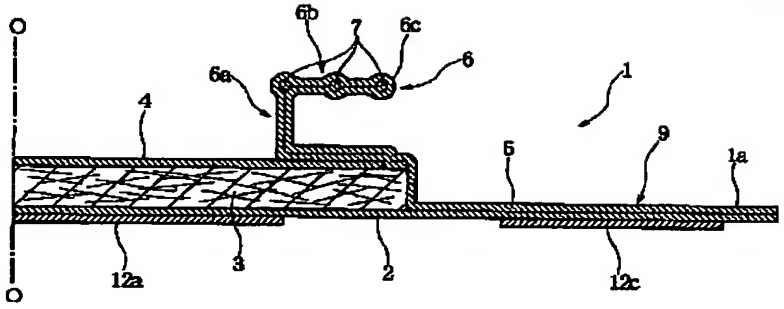
DRAWINGS

[Drawing 1]



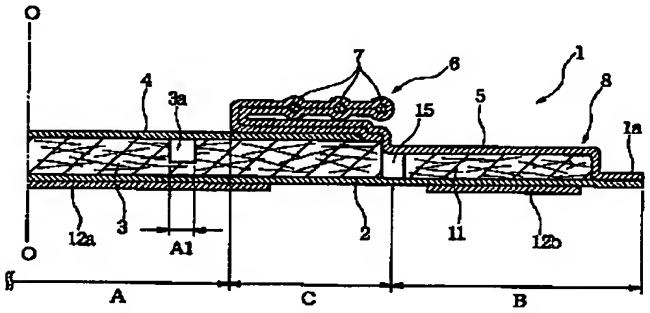
[Drawing 2]

図2



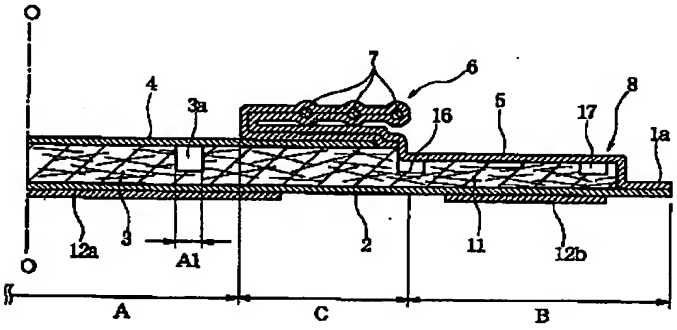
[Drawing 3]

図3



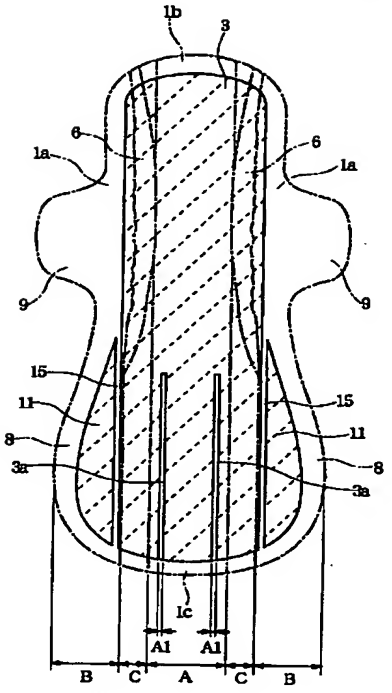
[Drawing 4]

図4



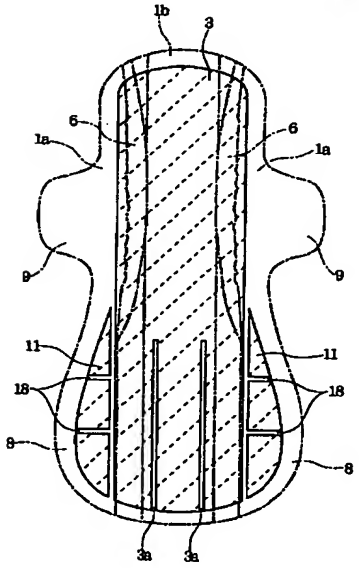
[Drawing 5]

図5



[Drawing 6]

図6



[Translation done.]